

CLAIMS:

1. Vehicle headlamp provided with a metal halide lamp comprising a discharge vessel surrounded with clearance by an outer envelope and having a ceramic wall which encloses a discharge space containing xenon (Xe) and an ionizable filling, wherein in said discharge space two electrodes are arranged whose tips have a mutual interspacing EA so as to define a discharge path between them, wherein the discharge vessel has an internal diameter Di at least over the distance EA, and wherein Di is smaller than or equal to 2 mm and the relation EA/Di is smaller than 6, characterized in that said vehicle headlamp has not more than one band-shaped light-absorbing coating laterally of the discharge path.
- 10 2. Vehicle headlamp according to claim 1, wherein the band-shaped light-absorbing coating is provided on the outer side of the ceramic wall of the discharge vessel.
3. Vehicle headlamp according to claim 1, wherein the band-shaped light-absorbing coating is provided on the inner side of the outer envelope.
- 15 4. Vehicle headlamp according to claim 1, wherein the band-shaped light-absorbing coating is provided on the outer side of the outer envelope.
5. Vehicle headlamp according to any of the preceding claims 1 through 4, 20 wherein the band-shaped light-absorbing coating is located underneath a horizontal plane along a central axis of the metal halide lamp during operation, while an edge of the band-shaped light-absorbing coating directed towards said horizontal plane and the horizontal plane itself enclose an angle of substantially 15° with one another.
- 25 6. Vehicle headlamp according to claim 5, wherein an edge of the band-shaped light-absorbing coating directed towards said horizontal plane and an edge of the band-shaped light-absorbing coating directed away from said horizontal plane enclose an angle of between 15° and 55° with one another.

7. Vehicle headlamp according to any of the preceding claims 1 through 6, wherein the discharge vessel has a circumferential clearance inside the outer envelope of at most 5 mm.

5 8. Vehicle headlamp according to any of the preceding claims 1 through 7, wherein the outer envelope is conically shaped and wherein the band-shaped light-absorbing coating – seen from a lamp cap supported by the outer envelope – extends in outward direction away from the discharge vessel.

10 9. Vehicle headlamp according to any of the preceding claims 1 through 8, wherein the band-shaped light-absorbing coating has a profiled shape.

10. Vehicle headlamp according to any of the preceding claims 1 through 9, wherein a central axis of the metal halide lamp is located at a distance above an optical axis 15 of a reflector present in the headlamp during operation, said distance varying between 0.1 and 0.9 mm, being in particular 0.5 mm, more in particular 0.45 mm.

11. A metal halide lamp to be used in a vehicle headlamp according to any of the preceding claims 1 through 10.